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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,389	12/10/2003	Takayuki Katoh	JP920020250US1	1388
63203 7590 11/02/2006 ROGITZ & ASSOCIATES 750 B STREET SUITE 3120 SAN DIEGO, CA 92101			EXAMINER YANCHUS III, PAUL B	
			ART UNIT 2116	PAPER NUMBER

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/707,389	KATOH	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paul B. Yanchus	2116	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-7 and 9-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 5-7 and 15-19 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

This non-final office action is in response to communications filed on 7/14/06.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ostojic, US Patent no. 6,771,053, in view of Applicant's Admitted Prior Art [AAPA].

Regarding claim 9, Ostojic discloses a power supply controller which controls a power supply unit having a plurality of power supplies each of which can be independently set to a plurality of states, said power supply controller comprising:

a state register circuit to store state values corresponding to a combination of voltages supplied by the power supply unit [inherent that microcontroller has some type of register to store values, column 4, lines 35-40];

a state value setting combination circuit which generates a change instruction to change the combination of voltages supplied by the power supply unit [column 4, lines 35-40];

a state value changing combination circuit which changes the state values when the change instruction is received to change the combination of voltages supplied by the power supply unit [column 4, lines 35-40]; and

an output section to transmit the combination of voltages corresponding to the change instruction state values successively changed by the state value changing combination circuit to the power supply unit [element 126 in Figure 2 and column 4, lines 10-15].

Ostojic discloses that the microcontroller has a programmable turn-on sequence for the plurality of power supplies, but does not disclose changing the state values one by one in a predetermined order corresponding to a target combination of voltages when the change instruction is received to change the combination of voltages supplied by the power supply unit. AAPA discloses changing output voltages sequentially in a predetermined order to prevent destruction or malfunction to circuitry [paragraph 0005]. It would have been obvious to one of ordinary skill in the art to modify the Ostojic controller to change output voltages of the power supplies sequentially in a predetermined order for the motivation of preventing destruction or malfunction to circuitry in the system [AAPA, paragraph 0005].

Regarding claims 10 and 11, Ostojic discloses an information processor which operates using a plurality of different operating voltages comprising:

a state register section which stores state values corresponding to a combination of voltages supplied to the information processor [inherent that microcontroller has some type of register to store values, column 4, lines 35-40];

a reference clock oscillator circuit [inherent that some type of clock generator would be used to provide a clock signal to the microcontroller];

a state value setting combination circuit which generates a change instruction to change the combination of voltages supplied to the information processor [column 4, lines 35-40];

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a state value changing combination circuit which changes the state values when the change instruction to change the combination of voltages supplied to the information processor is received [column 4, lines 35-40];

an output section through which the information processor is supplied the combination of voltages corresponding to the state values successively changed by said state value changing combination circuit [element 126 in Figure 2 and column 4, lines 10-15]; and

a power supply unit which supplies power to the information processor according to an instruction from said output section [buck switch, column 4, lines 10-15].

Ostojic discloses that the microcontroller has a programmable turn-on sequence for the plurality of power supplies, but does not disclose changing the state values one by one in a predetermined order corresponding to a target combination of voltages when the change instruction is received to change the combination of voltages supplied by the power supply unit. AAPA discloses changing output voltages sequentially in a predetermined order to prevent destruction or malfunction to circuitry [paragraph 0005]. It would have been obvious to one of ordinary skill in the art to modify the Ostojic controller to change output voltages of the power supplies sequentially in a predetermined order for the motivation of preventing destruction or malfunction to circuitry in the system [AAPA, paragraph 0005].

Regarding claims 12 and 13, Ostojic and AAPA do not disclose enabling the reference oscillator when the change instruction is received and disabling the reference oscillator when the state value combination circuit has stopped supplying the plurality of voltages. However, disabling a clock generator when a clock circuit is not being used is well known in the art. It would have been obvious to one of ordinary skill in the art to modify the Ostojic and AAPA

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information processor to disabling the reference oscillator when the state value combination circuit has stopped supplying the plurality of voltages in order to reduce unnecessary power consumption.

Regarding claim 14, Ostojic discloses information processor which operates using a plurality of power supplies each of which can be independently set in an on or off state, said information processor comprising:

a state register section which stores state values corresponding to a combination of voltages supplied to the information processor [inherent that microcontroller has some type of register to store values, column 4, lines 35-40];

a reference clock oscillator circuit [inherent that some type of clock generator would be used to provide a clock signal to the microcontroller];

a state value setting combination circuit which generates a change instruction to change the combination of voltages supplied to the information processor [column 4, lines 35-40];

a state value changing combination circuit which changes the state values when a change instruction to change the combination of voltages supplied to the information processor is received [column 4, lines 35-40];

an output section through which the information processor is supplied the combination of voltages corresponding to the state values successively changed by said state value changing combination circuit [element 126 in Figure 2 and column 4, lines 10-15]; and

a power supply unit which supplies power to the information processor according to an instruction from said output section [buck switch, column 4, lines 10-15].

. Ostojic discloses that the microcontroller has a programmable turn-on sequence for the plurality of power supplies, but does not disclose changing the state values one by one in a predetermined order corresponding to a target combination of voltages when the change instruction is received to change the combination of voltages supplied by the power supply unit. AAPA discloses changing output voltages sequentially in a predetermined order to prevent destruction or malfunction to circuitry [paragraph 0005]. It would have been obvious to one of ordinary skill in the art to modify the Ostojic controller to change output voltages of the power supplies sequentially in a predetermined order for the motivation of preventing destruction or malfunction to circuitry in the system [AAPA, paragraph 0005].

#### ***Allowable Subject Matter***

Claims 1-3, 5-7 and 15-19 are allowed.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul B. Yanchus whose telephone number is (571) 272-3678.

The examiner can normally be reached on Mon-Thurs 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on (571) 272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Yanchus  
October 30, 2006



REHANA PERVEEN  
SUPERVISORY PATENT EXAMINER  
10/30/06